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REMARKS

Claims 1-15 are pending in the application. Claims 1-15 have been rejected.

Claim Rejections under 35 U.S.C. § 102

Claims 1-15 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,542,490 B1 to Ahmadvand et al (hereinafter "Ahmadvand").

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. § 2131 (Aug. 2001) (quoting Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). "The identical invention must be shown in as complete detail as is contained in the . . . claim." Id. (quoting Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1051, 1053 (Fed. Cir. 1987)). In addition, "the reference must be enabling and describe the applicant's invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention." In re Paulsen, 30 F.3d 1475, 1479, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

Applicants respectfully submit that claims 1-15 are not anticipated by Ahmadvand for the reasons and explanations set forth below.

Ahmadvand discloses a data link control protocol for a 3G wireless system. (Title) The data link control protocol provides direct support for network layer protocols, e.g., the Internet Protocol (IP). (Abstract) The new Data Link Control (DLC) layer design of Ahmadvand may be viewed as an interface between the IP layer and the Physical layer and can accommodate a variety of Classes of Service (CoS) having different Quality of Service (QoS) requirements. (Col. 6, lines 50-55) The IP packets include the IP Quality of Service information (IPQoS). (Col. 6, lines 63-64) The DLC layer has a scheme to map the IPQoS requirements to the DLC CoS. (Col. 6, lines 64-65) Each CoS is separated inside the DLC protocol layer and directed to a specific QoS plane. (Col. 6, lines 65-67) A QoS processing module of the Link Access Control (LAC) layer is responsible for receiving the IP packets and extracting the IPQoS requirements included in the IP packets. IPQoS requirements are translated into QoS classes of service. (Col.

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7, lines 10-14) Based on the QoS classification obtained, the QoS processing module redirects the IP packets to the proper QoS data plane. (Col. 7, lines 27-30) A Segmentation and Reassembly (SAR) modules is provided in each QoS plane. (Col. 7, lines 37-38) The SAR module chops the augmented IP packet to smaller size packets, which are more suitable for error recovery and retransmission. These smaller size packets are defined as "sequence frames". The size of a sequence frame is variable and dynamically optimized for different QoS data planes based on the QoS requirements and the radio link conditions. (Col. 7, lines 44-51) A start of message bit field and a sequence number field are added to the payload. (Col. 7, lines 52-53) A number of smaller same Class of Service (CoS) sequence frames are presented by a respective SAR module to a Framing and Automatic Repeat Request (ARQ) module. (Col. 7, lines 57-60) The sequence frames are then encapsulated in High-level Data Link Control (HDLC)-like frames in a respective Framing and ARQ module. (Col. 7, lines 60-65)

Claims 1-4, 12, and 14

Applicants respectfully submit that Applicant's invention is not anticipated by Ahmadvand because the cited reference does not disclose all of the limitations of amended claims 1, 12, and 14. Specifically, Ahmadvand does not disclose "not including protocol information to identify a payload type". Ahmadvand discloses a data link control protocol for use in 3G wireless systems that handle both data and voice communications bi-directionally. Ahmadvand is not directed to a uni-directional broadcast service for a wireless communication system. Because Ahmadvand is used with both data and voice, protocol information is needed to properly direct received and transmitted frames. Ahmadvand is intended to assist in providing specific quality of service for subscribers that have requested a specific grade of service. The protocol information is needed to determine the quality of service and type of service the customer has requested. This is in contrast to Applicant's disclosure. Because Ahmadvand must process both data and voice information at varying levels of service, the protocol field cannot be eliminated from the frame before transmission. Protocol fields and control field serve different functions. As noted in Applicant's specification, the protocol field is used to identify the payload type. The control field has a static value. (par. 1064-1065). Ahmadvand is directed

toward protocol compatibility across multiple protocols and types. Eliminating protocol information would prevent the method disclosed in Ahmadvand from functioning.

In addition, the Examiner cites column 7, lines 12-13 as generating a portion of an Internet Protocol (IP) packet for transmission. Applicants respectfully disagree. Column 7, lines 110-13 states: "A QoS processing module 71 of the LAC layer 70 is responsible for receiving the IP packets and extracting the IP QoS requirements included in the IP packets. QoS requirements are translated into QoS classes of service." Therefore, Applicant respectfully requests that the rejection of claims 1, 12, and 14 be withdrawn because the prior art does not disclose all the limitations of the claims

Applicant respectfully submits that claim 12 is also allowable for the additional reason given below. The Examiner stated that transmitting the frame without the protocol information as found in amended claim 12 is disclosed in Ahmadvand at column 8, lines 3-5 as transmitting the frame without the control field reads on transmitting the frame without the protocol information. Applicant submits that a control field differs significantly from protocol information. At column 1, lines 23-30 Ahmadvand states that "Data link layer protocols are used to mitigate the effects of impairments introduced by the physical transmission medium. A Radio Link Protocol (RLP) is designed for the wireless system to deal specifically with types of impairments found on the radio link and comprises mechanisms to deal with errors on the communications link. . .". Without protocol information Ahmadvand cannot operate. Indeed, Ahmadvand discloses a "Data link Control Protocol for 3G Wireless System" (Title) Omitting control fields for greater transmission efficiency is different from omitting protocol information.

Claims 2-4 are allowable as depending directly from allowable amended claim 1.

Claims 5 and 6

Claim 5 is allowable for the same reason given above for claim 1.

Claim 6 is allowable as depending directly from an allowable independent claim.

Claims 7-11, 13, and 15

Claims 7, 13, and 15 are allowable for the same reasons given above for claim 1.

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Claims 8-11 are allowable as depending directly or indirectly from an allowable independent claim.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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